

### Problem 3

A Project Manager manages multiple projects. A project, before final release, is required to have a specified feature set. Associated with a project are multiple releases. A release is a functional piece of the project being developed that includes a subset of the feature set for the project and which is to be delivered on a specified date (the feature set and release date are determined by the Project Manager). When the last release is delivered, the project is considered completed. Associated with each feature for a project is a developer who is responsible for developing this feature for inclusion in the project. A developer has an id and provides, for each feature he is responsible for, the estimated time remaining to complete work on that feature. The Project Manager assigns features to developers to work on.

#### List of noun phrases

Project Manager	feature set	estimated time
Multiple projects	release date	complete work
Project	Project Manager	Project Manager
final release	Last release	developers
specified feature set	Project	
project	Completed	
Multiple releases	each feature	
Release	project	
project	developer	
Subset of the feature set	responsible	
Project	developing	
specified data	feature	

#### Sort and eliminate duplicate

Project Manager	feature set	estimated time
<del>Multiple projects</del>	release date	work
Project	<del>Project Manager</del>	Project Manager
final release	Last release	<del>developers</del>
specified feature set —	Project	
<del>project</del>	Completed	
Multiple releases	<del>each feature</del>	
Release	project	
<del>project</del>	developer	
Subset of the feature set	responsible	
<del>Project</del>	developing	
specified data	feature	

#### Streamline the list further

Project Manager	deadline	estimated time
project	feature set	work
final release	release date	id
specified feature set	Last release	
	developer	
release	feature	

## Group synonymous

Project manager

Project  
features

release  
release data  
feature set

developer  
estimated time

## Class Name

### **Project manager**

- mangerID: String
- projects: List<Project>

### **Project**

- features: List<Feature>
- projectID: String
- release: List<Release>
- projectStatus: String

### **Release**

- releaseID: String
- releaseData: Date
- featureSet: List<Feature>

### **Feature**

- featureName: String
- estimatedRemainingTime: Date

### **Developer**

- developerID: String
- features: List<Feature>